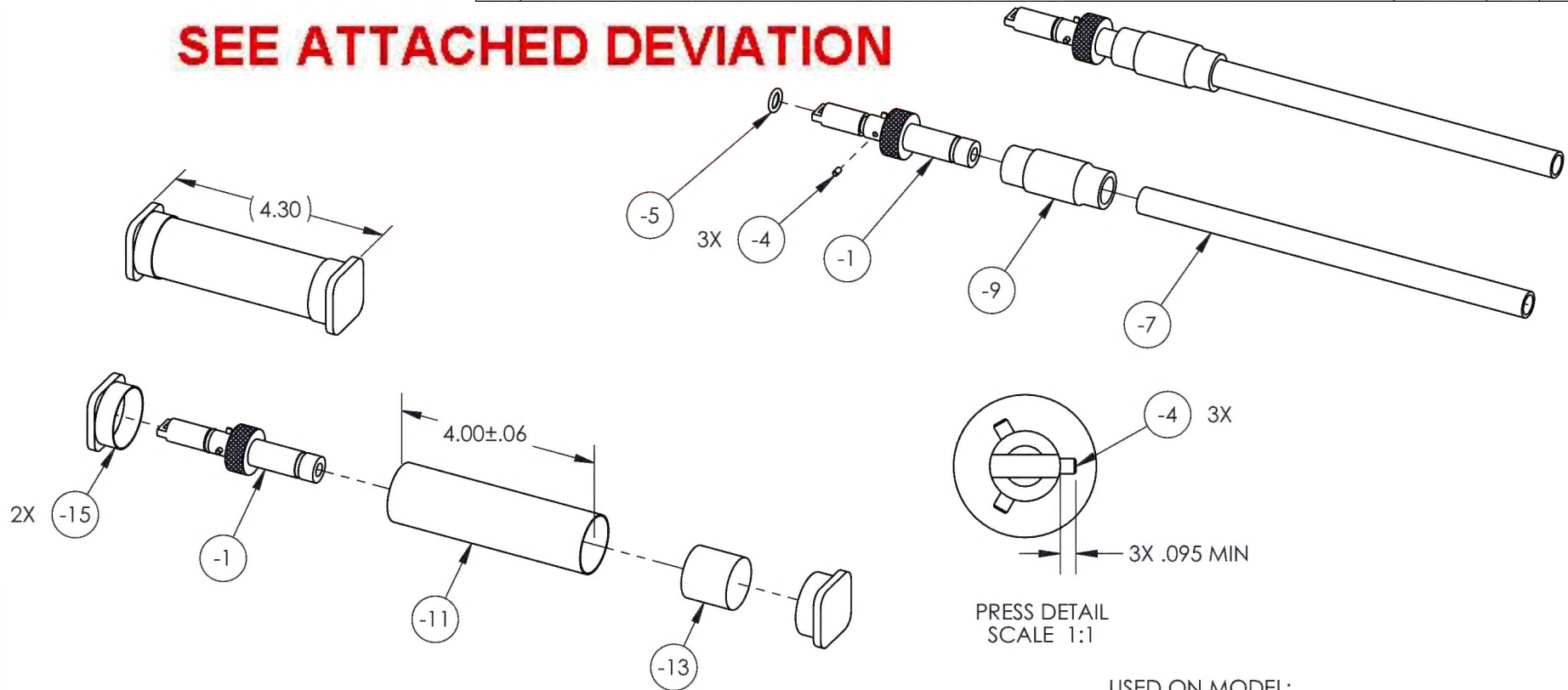


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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGED P/N FROM DB3703-30	4/21/2006	COLE	APPROVED
2	IMPLIMENTED NEW DWG FORMAT. DELETED -3 FERRAL & TWO OF -1 HOSE RIBS. REDUCED FROM TWO PAGES TO ONE. ADDED ASSY DRAWING.	5/19/2008	WP	DW
3	CH'D CENTER HOLE FROM $\varnothing .225$ TO $\varnothing .250$, CH'D .065 DIM TO .070 ON -1 PER GE. ADDED HEAT SHRINK TO BOM & LABEL NOTE ON ASSY.	2/10/2010	RJC	RW
4	MODIFIED -1 TO WORK WITH COUPLING, ADDED COUPLING, DELETED HOSE CLAMP AND HEAT SHRINK TUBE. ADDED -11, -13, -15, EXPLODED VIEW AND UPDATED BOM.	8/1/2012	JAG	
4A	-11 CH'D DIM WAS 4.10 IS 4.00. -13 CH'D MATERIAL TO NEW PIG CORP. #PAD210.	2/5/2014	DPD	RW

SEE ATTACHED DEVIATION



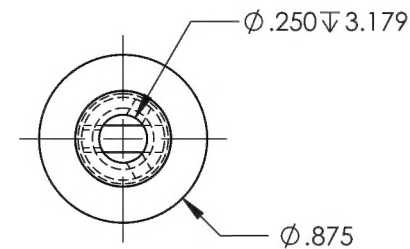
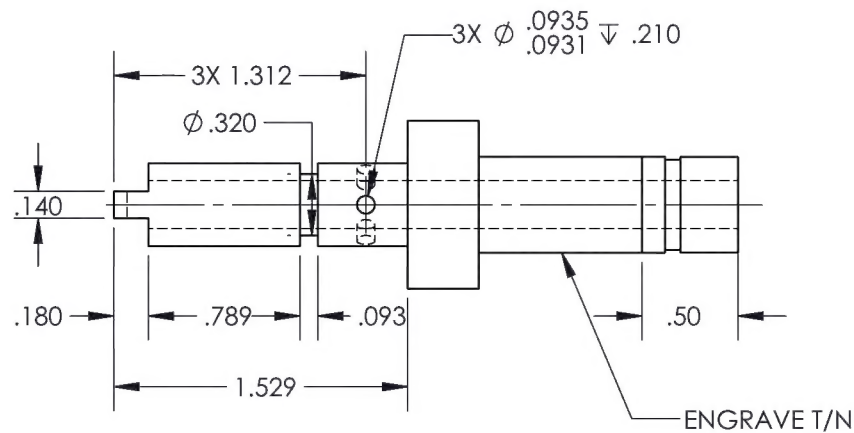
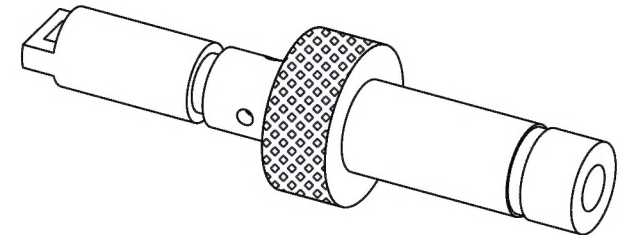
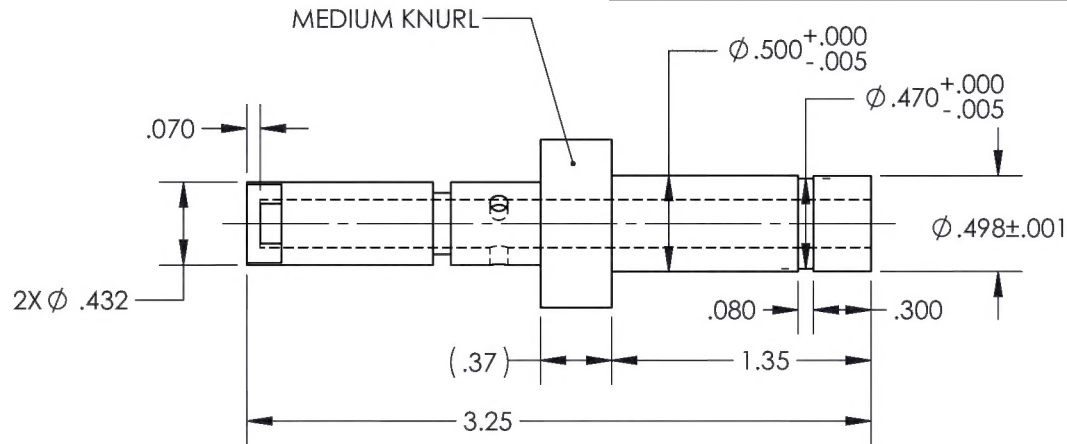
USED ON MODEL:
BELL 205-212, B3703 CHIP DETECTOR

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	BODY	6061	$\varnothing 7/8$ X 3-3/8	2
		B/O	-4	3	DOWEL PIN	S.S.	$\varnothing 3/32$ X 3/16 MCMaster-CARR #90145A433	1
		B/O	-5	1	O-RING	VITON	2-011N70 OR MCMaster-CARR #9263K642	1
		B/O	-7	1	HOSE	VINYL	$\varnothing 1/2$ O.D. x $\varnothing 3/8$ I.D. x 6ft KURI-TECH #K010-0608	1
		B/O	-9	1	COUPLING	NICKEL-PLATED BRASS	$\varnothing 1/2$ MCMaster-CARR #51495K116	1
		B/O	-11	1	TUBE	POLYETHYENE	$\varnothing 1.09$ MCMaster-CARR #2044T47	1
		B/O	-13	1	FOAM	POLYESTER/POLYURETHANE	$\varnothing 1$ X 1 NEW PIG CORP. #PAD210	1
		B/O	-15	2	CAP	VINYL	$\varnothing 1.09$ MCMaster-CARR #2044T67	1

RED BARN MACHINE	
TITLE T/R GEAR BOX DRAIN TOOL	
DWG NO. RBT18547	REV 4A
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 .XX ± .01 .X ± .1 FRACTIONS ± 1/32 ANGLES ± 5°	DRAWN BY: COLE APPROVED: D Weil HEAT TREAT FINISH SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:3	DATE 2/5/2003
SHEET 1 OF 2	

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CHANGED P/N FROM DB3703-30	4/21/2006	COLE	APPROVED
2	IMPLIMENTED NEW DWG FORMAT. DELETED -3 FERRAL & TWO OF -1 HOSE RIBS. REDUCED FROM TWO PAGES TO ONE. ADDED ASSY DRAWING.	5/19/2008	WP	DW
3	CH'D CENTER HOLE FROM $\phi .225$ TO $\phi .250$, CH'D .065 DIM TO .070 ON -1 PER GE. ADDED HEAT SHRINK TO BOM & LABEL NOTE ON ASSY.	2/10/2010	RJC	RW
4	INCREASED STEM LENGTH FROM .81 TO 1.35 TO WORK WITH COUPLING, DELETED BARB, ADDED GROOVE.	8/1/2012	JAG	



(-1)
BODY

SEE ATTACHED DEVIATION

RED BARN MACHINE	
TITLE T/R GEAR BOX DRAIN TOOL	
DWG NO. RBT18547-1	REV 4A
MAT'L 6061	DRAWN BY: COLE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX $\pm .005$	HEAT TREAT
.XX $\pm .01$	FINISH RED ANODIZE
.X $\pm .1$	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	MIL-A-8625F, TYPE II, CLASS II
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
	SEE SHT 1
SCALE 1:2	DATE 2/5/2003
	SHEET 2 OF 2

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. <u>RBT18547 Rev. 4a</u>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/> </div> </div>			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042) Oct 30, 2018	
Description Work Order Deviation		Disposition		Completed By	
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)		Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable). This deviation is acceptable. The fit, form and function of the part will be as originally intended.		Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause		FAULT CATEGORY			
<div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input checked="" type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div>		<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread </div> </div>			

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. <u>RBT18547 Rev. 4a</u>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>	DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Cross tube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> </div> <div> Eng. (Non-AW) <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Water Jet <input type="checkbox"/> Supplier <input type="checkbox"/> Quality <input type="checkbox"/> </div> </div>			
Date : _____	Sequence #: _____	QTY Affected : _____		MRB (QSI042) Oct 30, 2018	
Description Work Order Deviation		Disposition		Completed By	
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)		Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush. Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable). This deviation is acceptable. The fit, form and function of the part will be as originally intended.		Lead hand / Supervisor	
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Root Cause		FAULT CATEGORY			
<div style="display: flex; flex-direction: column;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input checked="" type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div>		<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Bending <input type="checkbox"/> Crushing <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Mislabeled </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Incomplete/Unclear Instructions <input type="checkbox"/> Drill Holes <input type="checkbox"/> Fit/Function </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain Direction <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Off-set/Set-up </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Outside Tolerance <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Misread </div> </div>			